## NHDES

## The State of New Hampshire

## Department of Environmental Services



## Michael P. Nolin Commissioner

Rich Lieberstein 69 Stratton Road Jaffrey, NH 03452 LETTER OF DEFICIENCY WMB BWQ 06 001 May 16, 2006

File: 1588, Lake Skatutakee, Harrisville, Dublin Rd.

Dear Mr. Lieberstein:

On May 15, 2006, personnel from the Department of Environmental Services (DES) conducted an inspection of your property on Dublin Rd., Harrisville, NH, more specifically identified on Harrisville Tax Map 30, Lot 21-4 ('the property'). The purposed of the inspection was to 1) determine compliance with RSA 485-A:8 and NH Administrative Rules Ws 1700 *et seq.* and 2) provide guidance for temporary erosion control measures until an erosion control plan based upon existing site conditions can be developed, reviewed and implemented.

Based on photographs taken by the Town Conservation Commission on May 13, 2006 and the DES inspection on May 15, 2006, the following deficiencies were identified:

- a. A sediment plume discharging to Lake Skatutakee. The plume was a result of work conducted during the May 12-13 rain event. The Conservation Commission estimated the plume extended greater than 200 feet from shore.
- b. Inadequate erosion control measures installed during driveway construction. Approximately 2 acres with varying grades between 5 and 18% had been cleared of timber. Approximately 10,000 square feet had significant ruts, and approximately 20,000 square feet had significant ruts with boulders and stumps removed. None of the erosion control measures specified on the Town approved building permit were installed correctly or according to the plan.

Two water samples were collected on May 15, 2006 greater than 24 hours after all equipment had been removed from the site. The results of sample analyses and station locations are provided below:

Station ID	Station Description	Nephelometric Turbidity Unit (NTU)
1588-PS001	Intermittent stream background, NW side of property	1.03
1588-PS002	Intermittent stream at construction site impact before discharging from property to 12 inch metal culvert under Dublin Rd.	59.2

The deposition of sediment resulting in turbidity and benthic deposits to a Class B waterbody is a violation of the following surface water quality standards:

- 1. General Water Quality Criteria [Env-Ws 1703.03] which states that all surface waters shall be free from substances in kind or quantity which settle to form harmful deposits or produce turbidity which is not naturally occurring and would render it unsuitable for its designated uses.
- 2. Benthic Deposits [Env-Ws 1703.08] which states that Class B waters shall contain no benthic deposits that have a detrimental impact on the benthic (lake bottom) community.
- 3. Turbidity [Env-Ws 1703.11] which states that Class B waters shall not exceed the naturally occurring conditions by more than 10 NTUs.

In addition to the above noted water quality violations, the following stream impacts without a DES Wetlands Dredge and Fill Permit were documented:

a. Approximately 30 linear feet of stream impact for the culvert replacement along the Dublin Road

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ditch line. A 5 inch diameter metal pipe was replaced with an 8 inch x 24 foot plastic pipe in a flowing stream on the property. The stream discharges to Lake Skatutakee approximately 600 feet downstream.

b. Approximately 70 feet of dredging had occurred in a flowing intermittent stream in preparation to install a 20 inch x 24 foot culvert for driveway access.

You are responsible for avoiding future violations of water quality standards. DES believes that avoidance of further water quality violations can be achieved by conducting the following remedial actions:

- 1. Install temporary erosion control measures by hand. DES recommends that the erosion control be installed or inspected by an erosion control professional and maintained until a permanent solution preventing further erosion has been achieved. Please notify the DES Watershed Management Bureau within 24 hours of properly installing the temporary erosion control. Temporary erosion control measures include:
  - a. Erosion control stone (no less than 1.5 inch diameter) on both entrance areas. The log road entrance area (entrance #1) being approximately 30 feet x 30 feet and the new entrance area (entrance #2) with the existing 8 inch plastic pipe being 30 feet x 20 feet. It may be necessary to add non-woven geotextile fabric to entrance area #2 to cover all non-stabilized sediment before placing stone. Stone should be approximately 3-4 inches thick for both entrance areas.
  - b. Properly install silt fence at entrance #2, approximately 30 feet from Dublin Rd.
  - c. Properly install filter sediment basin just downslope of the BM Hemlock (new drive sta. 2+00) using stone and filter fabric. The sediment basin should be installed in the west ditch line of log road approximately 120 feet from Dublin Road. The sediment basin should be approximately 10 feet x 10 feet in size. Check dam on downstream end of sediment basin should be 12 to 18 inches high.
  - d. Properly install silt fence just uphill of the BM Hemlock. This includes hand digging the trench and properly supporting the downhill side with staked hay bales or sediment logs.
- 2. Secure all necessary DES Wetlands Dredge and Fill permits for the property prior to any further site work.
- 3. Properly maintain temporary erosion control measures to prevent eroded material from discharging to all surface waters including streams, wetlands and Lake Skatutakee. DES recommends that the erosion control be inspected and maintained by an erosion control professional prior to and following every stormwater runoff event until a permanent solution preventing further erosion has been achieved.
- 4. Hire a professional to design a remedy, preventing further land erosion at the property into surface waters.
- 5. Submit specific construction timetable and workplan for phasing the driveway construction. This should include details on contractor(s) availability, parts order and delivery dates, preliminary site work/assembly, construction, site work/erosion control, final grading, and final driveway/ property stabilization.

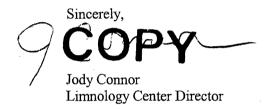
Compliance with the cited water quality deficiencies can be achieved by proper installation of erosion control measures to avoid violations of State Water Quality Standards. Compliance with the cited wetland impact deficiencies can be achieved by coordinating with Bill Thomas at the DES Wetlands Bureau at 603-271-2147.

In addition, a summary report that includes design plans outlining how compliance and temporary erosion control measures have been achieved and permanent erosion control measures will be achieved

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according to the outlined remedial action should be submitted to DES within 30 calendar days from receipt of this letter. In the event that appropriate actions are not taken, DES may order you to take remedial measures as may be necessary. Failure to comply with RSA 485-A:8 will result in enforcement by DES, including but not limited to the issuance of fines, administrative orders, or referral to the New Hampshire Office of the Attorney General for prosecution of civil or criminal penalties. In addition, DES personnel may conduct another inspection at a later date to determine whether you have come into, and are maintaining, full compliance with the applicable statute. This includes following final completion of site development and maintenance of the driveway, preventing additional water quality impacts.

If you have any questions, please contact Andy Chapman at 603-271-5334 or <u>achapman@des.state.nh.us</u>. Copies of Env-Ws 1700 are available through the DES Public Information Center at (603) 271-2975 or via the internet at http://des.nh.gov/rules/env-ws1700.pdf.



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Bill Thomas, DES Wetlands Bureau
Mike Wilder, Selectman
Bob Maher, Selectman/Building Inspector
Renne Fish, District 4 Engineer
Winston Sims, Conservation Commission
Wesley Tarr, Jr., Harrisville Road Agent
Sharon Monahan, CWS
Ronald Bell, Bell Engineering, Inc.
DES Watershed Management Bureau File (#1588)